

## 1.3 Stem and Leaf Plots

**Stem and Leaf Plot** = a graphical way of organizing and presenting a set of data which places the data into categories based on place value.

### **How to form one:**

1) Place data in order

2) Outline 2 columns as such: 

Stem	Leaf

3) The last digit in the number is the leaf, and the remaining digits are the stems.

4) The first number in the stem will be the smallest and the last number in the stem will be the largest.

- We collect data to see if there is any pattern found. We do this by viewing if there are clusters formed in the data.

**Distribution:** how all the data values in a set of data are spread.

**Cluster:** areas where an increased amount of data is present when a stem and leaf plot is made.

Stem & Leaf Plot	
Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• shows each piece of data individually</li> <li>• highlights where data clusters</li> <li>• looks like a detailed bar graph</li> </ul>	<ul style="list-style-type: none"> <li>• can be awkward to use in large data sets</li> <li>• <u>median is not indicated</u></li> <li>• does not highlight outliers</li> </ul>

### Practice:

The following data table contains the average hours per week students in grade 10 watch television.

					Stem	Leaf
25.1	28.8	24.8 x	27.3	26.1	23	4
23.4 x	25.9	24.3 x	27.0	25.2	24	3 8
					25	
					26	
26.4	30.2				27	
					28	

1. Create a stem and leaf plot of the data above.
2. List the greatest amount of time spent watching TV.
3. List the least amount of time spent watching TV.
4. Are there any clusters? What does it tell you?
5. Describe how the data are spread, and what does it tell you about students watching TV.

Stem	Leaf
23	4
24	3 8
25	1 2 9
26	1 4
27	0 3
28	8
29	
30	2

Classwork/Homework:



- Complete a stem and leaf plot for the following data: 22 27 12 15 9 21 34 50 11 10
- Complete Questions 5 - 8 on page 17 & 18  
(For the above questions, #5-8, use the stem and leaf data on page 17- side margin)